Example 1.0
Malting Barley Endorsement
Detailed Example with one Malt Barley Contract
1 Unit without a Loss and 2 Units with a Loss

Current Year's APH

Planting 100 Acres in 2017				Planting 200 acres in 2017				Planting 125 acres in 2017			
2017	Crop: Barley (0091)			**2017**	Crop: Barley (0091)			**2017**	Crop: Barley (0091)		
UNIT #	Practice: NI (003)			UNIT #	Practice: NI (003)			UNIT #	Practice: NI (003)		
0001OU	Type: **Malting (873)**			**0002OU**	Type: **Malting (873)**			**0003OU**	Type: **Malting (873)**		
Year	Pro-duction	Acres	Yield	Year	Pro-duction	Acres	Yield	Year	Pro-duction	Acres	Yield
2012	0	0	Z	2012	2066	30	A69	2012	0	0	Z
2013	4040	105	A38	2013	0	0	Z	2013	830	12	A80
2014	0	0	Z	2014	966	10	A97	2014	0	0	Z
2015	2720	40	A68	2015	2220	36	A62	2015	0	0	Z
2016	5520	80	A69	2016	2090	35	A60	2016	1170	14.8	A79
T-YLD 45	**Approved Yield 55**			T-YLD 45	**Approved Yield 72**			T-YLD 45	**Approved Yield 60**		

The policyholder has <u>one malting barley</u> contract for delivery of 26,000 bushels of malting barley. The malting barley contract provides premium amount of minus $1.00 per bushel.

Step 1: Multiply the planted acres intended to fulfill the contract by the approved APH yield by unit to determine the bushels per unit.

Unit 1: 55 bushels x 100 acres =   5,500 bushels
Unit 2   72 bushels x 200 acres = 14,400 bushels
Unit 3   60 bushels x 125 acres =   7,500 bushels
Total: 27,400 bushels

Step 2: Determine the proration factor for each unit by dividing the bushels per unit by the total bushels determined in Step 1 (rounded to 3 decimal places).

Unit 1: 5,500/27,400 = 0.201
Unit 2: 14,400/27,400 = 0.526
Unit 3: 7,500/27,400 = 0.274

Note: If the total of these factors do not equal 1.000, as shown in this example, adjust one or more of these factors so the total equals 1.000. Unit 2 was adjusted from 0.526 to 0.525.

Step 3: Prorate contracted bushels for each unit by multiplying the factor determined in Step 2 by the total contracted bushels.

        Unit 1:   0.201 x 26,000 =   5,226 bushels
        Unit 2:   0.526 x 26,000 = 13,676 bushels
        Unit 3:   0.274 x 26,000 =   7,124 bushels

Step 4: Determine the contracted acres by dividing by the APH yield.

        Unit 1:   5,226/55 = 95.0 acres
        Unit 2:   13,676/72 = 189.9 acres
        Unit 3:   7,124/60 = 118.7 acres

Step 5: Determine the non-contracted acres.

        Unit 1:   100 – 95.0 acres = 5.0 acres
        Unit 2:   200 – 189.9 acres = 10.1 acres
        Unit 3:   125 – 118.7 acres = 6.3 acres

The base price is not available by the acreage reporting date. The projected price for wheat (see section 10 of the MBE) is $5.50 per bushel.

- The contract price for the contracted malting barley acreage is $5.50 + (-$1.00) = $4.50 per bushel.
- The feed barley price is $3.40 per bushel.

Step 6: Determine the weighted average projected price.

Unit 0001 (95.0 acres x $4.50 + 5.0 acres x $3.40) ÷ 100 acres = ($427.50 + $17.00) ÷ 100 acres = $4.45 per bushel.

Unit 0002 (189.9 acres x $4.50 + 10.1 acres x $3.40) ÷ 200 acres = ($854.55 + $34.34) ÷ 200 acres = $4.44 per bushel.

Unit 0003 (118.7 acres x $4.50 + 6.3 acres x $3.40) ÷ 125 acres = ($534.15 + $21.42) ÷ 125 acres = $4.44 per bushel.

Step 7: Determine the initial revenue guarantee.
The policyholder chose revenue protection (RP) at the 70 percent coverage level. **The revenue guarantee by unit is:**

        Unit 1:   55 bushels x 0.70 x $4.45 x 100 acres = $17,132.50
        Unit 2:   72 bushels x 0.70 x $4.44 x 200 acres = $44,755.20
        Unit 3:   60 bushels x 0.70 x $4.44 x 125 acres = $23,310.00
        Total: $85,197.70

The harvest price for wheat (section 10 of the MBE) is $6.00 per bushel. The harvest price for the policyholder's malting barley is determined as follows:

Unit 1: $4.45 - $5.50 = minus $1.05
Unit 2: $4.44 - $5.50 = minus $1.06
Unit 3: $4.44 - $5.50 = minus $1.06

Unit 1: $6.00 - $1.05 = $4.95 per bushel
Unit 2: $6.00 - $1.06 = $4.94 per bushel
Unit 3: $6.00 - $1.06 = $4.94 per bushel

Step 8: The price went up during the insurance period; therefore, the coverage goes up since the policyholder chose RP. **The revised revenue guarantees are**:

Unit 1: 55 bushels x 0.70 x max ($4.45 projected price, $4.95 harvest price) x 100 acres x 1.000 share = **$19,057.50**

Unit 2: 72 bushels x 0.70 x max ($4.44 projected price, $4.94 harvest price) x 200 acres x 1.000 share = **$49,795.20**

Unit 3: 60 bushels x 0.70 x max ($4.44 projected price, $4.94 harvest price) x 125 acres x 1.000 share = **$25,935.00**.

Total Revenue Guarantee all Units: $94,787.70

Claim Example 1

Unit 0001

The revenue guarantee = 55 bushels x 0.70 x max ($4.45 projected price, $4.95 harvest price) x 100 acres x 1.000 share = **$19,057.50**

5,000 bushels are produced in Unit 0001, all of which are rejected by the buyer and grade U.S No. 5.

The harvest price for barley according to the CEPP is $3.60.

The adjusted quantity under the MBE is: 5,000 bushels x ($3.60 ÷ $4.95) = 3,636.4 bushels.

The adjusted quantity from the MBE is also then further adjusted for quality under the Small Grains Crop Provisions. The discount for the barley grading U.S. No. 5 from the quality statement in the Special Provisions is (1 – 0.262).

3,636.4 adjusted bushels under MBE X (1 – 0.262) = 2,683.7 bushels

To calculate an indemnity (following the steps specified in the Small Grains Crop Provisions):

(1) The revenue guarantee is $19,057.50;

(2) 2,683.7 bushels x $4.95 = $13,284.32;
(3) The value of the production to count is $13,284.32;
(4) $19,057.50 - $13,284.32 = $5,773.18; and
(5) $5,773.18 x 1.000 share = **$5,773** indemnity.

Note: The acres and production to put on next year's APH for Unit 0001 are 100 acres and 3,690 bushels.

5,000 bushels X (1 – 0.262) = 3,690 which includes only the quality adjustment in accordance with the Small Grains Crop Provisions.

Unit 0002
The revenue guarantee = 72 bu x 0.70 x max($4.44 projected price, $4.94 harvest price) x 200 acres x 1.000 share = **$49,795.20**

12,000 bushels are produced in Unit 0002, all of which are rejected by the buyer.

The harvest price for barley according to the CEPP is $3.60.

The adjusted quantity under the MBE is 12,000 bushels x ($3.60 ÷ $4.94) = 8,744.9 bushels.

To calculate an indemnity (following the steps specified in the Small Grains Crop Provisions):

(1) The revenue guarantee is $49,795.20;
(2) 8,744.9 bushels x $4.94 = $43,199.81;
(3) The value of the production to count is $43,199.81;
(4) **$49,795.20** - $43,199.81 = $6,595.39 indemnity payable.
(5) $96,595.39 x 1.000 share = **$6,595** indemnity.

Note: The acres and production to put on next year's APH for Unit 0002 are 200 acres and 12,000 bushels.

Unit 0003
8,000 bushels are produced in Unit 0003, all of which are accepted by the buyer. The 8,000 bushels X $4.94 harvest price for the policyholder's malting barley = $39,520. This is above the revenue guarantee (**$25,935.00**) on the unit. Therefore, there is NO indemnity on Unit 0003.

Note: The acres and production to put on next year's APH for Unit 0003 are 125 acres and 8,000 bushels.

Claim Example 2

What if this policyholder had elected an enterprise unit on the farm in Claim Example 1? The total loss paid with 3 optional units is $12,368.

Had this been insured with an enterprise unit versus optional units, the loss would be calculated as follows:

Total Revenue Guarantee = $94,787.70

Production to count for loss determinations:

8,000 bushels accepted by buyer	= 8,000.0
5000 rejected and grade US 5	= 2,683.7 adjusted bushels
12,000 rejected	= <u>8,744.9</u> adjusted bushels
Total	= 19,428.6

Weighted Average Projected Price:
  Contracted Acres = 403.6 x $4.50
  Non-contracted Acres = 21.4 x $3.40
  ($1,816.20 + $72.76)/425.0 = $4.44

The harvest price for wheat (section 10 of the MBE) is $6.00 per bushel. The harvest price for the policyholder's malting barley is determined as follows:
  $4.44 - $5.50 = minus $1.06
  $6.00 - $1.06 = $4.94

Total = 19,428.6 total bushels x $4.94 = $95,977.28, which exceeds the revenue guarantee and no loss.

Note: If the insured had databases established for optional units and did not commingle the production, the acres and production to put on next year's APH are:

- **Unit 0001 - 100 acres and 3,690 bushels.**
- **Unit 0002 - 200 acres and 12,000 bushels.**
- **Unit 0003 - 125 acres and 8,000 bushels.**

<div align="center">

Example 2.0
Malting Barley Endorsement
Detailed Example with Multiple Malt Barley Contracts and Units

</div>

This example shows how to determine a weighted average price by unit with multiple contracts/ contract prices and contracted and non-contracted acres.

<div align="center">

Current Year's APH

</div>

Planting 100 Acres in 2017				Planting 200 acres in 2017				Planting 125 acres in 2017			
2017	Crop: Barley (0091)			**2017**	Crop: Barley (0091)			**2017**	Crop: Barley (0091)		
UNIT #	Practice: NI (003)			UNIT #	Practice: NI (003)			UNIT #	Practice: NI (003)		
0001OU	Type: **Malting (873)**			**0002OU**	Type: **Malting (873)**			**0003OU**	Type: **Malting (873)**		
Year	Pro-duction	Acres	Yield	Year	Pro-duction	Acres	Yield	Year	Pro-duction	Acres	Yield
2012	0	0	Z	2012	2066	30	A69	2012	0	0	Z
2013	4040	105	A38	2013	0	0	Z	2013	830	12	A80
2014	0	0	Z	2014	966	10	A97	2014	0	0	Z
2015	2720	40	A68	2015	2220	36	A62	2015	0	0	Z
2016	5520	80	A69	2016	2090	35	A60	2016	1170	14.8	A79
T-YLD 45	**Approved Yield 55**			T-YLD 45	**Approved Yield 72**			T-YLD 45	**Approved Yield 60**		

The policyholder has <u>two malting barley</u> contracts.

Malt Contract A – 10,000 bushels at a fixed price of $4.50/bushel.
Malt Contract B - 16,000 bushels and the contract provides a premium amount of minus $1.00 per bushel. The base price is not available by the acreage reporting date. The projected price for wheat (see section 10 of the MBE) is $5.20 per bushel. The contract price for the contracted malting barley acreage is $5.20 + (-$1.00) = $4.20 per bushel.

Step 1: Calculate the weighted average price for the contracts by multiplying each contract price by the quantity applicable to the contract; adding those results; and dividing by the total contracted quantity. The result is the production weighted average of the base prices applicable to each contract.

There are two malting barley contracts, one for 10,000 bushel and one for 16,000 bushel. The base price for the 10,000 bushel contract is $4.50; the base price for the 16,000 bushel contract is $4.20. The projected price is

(10,000 bushel x $4.50 + 16,000 bushel x $4.20) ÷ 26,000 bushel = $4.32.

Step 2: Multiply the planted acres intended to fulfill the contract by the approved APH yield by unit to determine the bushels per unit.

Unit 1:   55 bushels x 100 acres = 5,500 bushels
Unit 2   72 bushels x 200 acres = 14,400 bushels
Unit 3   60 bushels x 125 acres = 7,500 bushels
Total: 27,400 bushels

Step 3: Determine the proration factor for each unit by dividing the bushels per unit by the total bushels determined in Step 1 (rounded to 3 decimal places).

Unit 1: 5,500/27,400 = 0.201
Unit 2: 14,400/27,400 = 0.525
Unit 3: 7,500/27,400 = 0.274

Note: If the total of these factors do not equal 1.000, as shown in this example, adjust one or more of these factors so the total equals 1.000. Unit 2 was adjusted from 0.526 to 0.525.

Step 4: Prorate contracted bushels for each unit by multiplying the factor determined in Step 3 by the total contracted bushels.

Unit 1: 0.201 x 26,000 = 5,226 bushels
Unit 2: 0.525 x 26,000 = 13,650 bushels
Unit 3: 0.274 x 26,000 = 7,124 bushels

Step 5: Determine the contracted acres by dividing by the APH yield.

Unit 1: 5,226/55 = 95.0 acres
Unit 2: 13,650/72 = 189.6 acres
Unit 3: 7,124/60 = 118.7 acres

Step 6: Determine the non-contracted acres.

Unit 1: 100 – 95.0 acres = 5.0 acres
Unit 2: 200 – 189.6 acres = 10.4 acres
Unit 3: 125 – 118.7 acres = 6.3 acres

Step 7: Determine the weighted average projected price.

The weighted average contract price is $4.32 (from step 1) and the feed barley price is $3.40 per bushel.

Unit 0001 (95.0 acres x $4.32 + 5.0 acres x $3.40) ÷ 100 acres = ($410.40 + $17.00) ÷ 100 acres = $4.27 per bushel.

Unit 0002 (189.6 acres x $4.32 + 10.4 acres x $3.40) ÷ 200 acres = ($819.07 + $35.36) ÷ 200 acres = $4.27 per bushel.

Unit 0003 (118.7 acres x $4.32 + 6.3 acres x $3.40) ÷ 125 acres = ($512.78 + $21.42) ÷ 125 acres = $4.27 per bushel.

Step 8: Determine the initial revenue guarantee.

The policyholder chose revenue protection (RP) at the 70 percent coverage level. **The revenue guarantee by unit is:**

Unit 1:   55 bushels x 0.70 x $4.27 x 100 acres = $16,439.50
Unit 2:   72 bushels x 0.70 x $4.27 x 200 acres = $43,041.60
Unit 3:   60 bushels x 0.70 x $4.27 x 125 acres = $22,417.50
Total: $81,898.60

The rest of the example works exactly like Example 1.0.